Remarks/Arguments:

Claims 1-10 are pending. Claims 1-10 stand rejected.

Section 102/103 Rejections:

Claims 1-3 and 7-9 have been rejected as being anticipated in view of Ng. Claims 4-5 and claim 10 have been rejected as being obvious in view of Ng. Claim 6 has been rejected as being obvious in view of Ng and further in view of Pryor. Applicants respectfully submit that this rejection is overcome for the reasons set forth below.

Amended claim 1 now includes features which are not suggested by the cited references, namely:

- the plurality of channels being arranged in a plurality of channel patterns, and the plurality of pixels being arranged in a plurality of pixel patterns, **each of the plurality of channel patterns being mapped to a respective one of the plurality of pixel patterns**, and
- **each of the pixels and each of the channels includes**, respectively, a **pixel face surface and a channel face surface in opposing relationship to each other**,
- **the pixel and channel face surfaces each having a linear boundary**,
- wherein **respective linear boundaries of the plurality of channels are arranged so that they do not cross respective linear boundaries of the plurality of pixels**.

Basis for amended claim 1 may be seen, for example, in FIGS. 8 and 9A-9E. As shown in FIG. 8, channel patterns are misaligned with respect to pixel patterns. More specifically, FIG. 8 shows a misalignment between channel pattern 804 and pixel pattern 802. FIG. 9B, on the other hand, shows an exemplary implementation of the present invention, wherein channel pattern 914 is aligned with respect to pixel pattern 912.

As also shown, for example, in FIG. 6B, each pixel and each channel has a face surface, in opposing relationship to each other. Each pixel and each channel has a linear boundary. Returning to FIG. 9B, the linear boundaries of channels 914 are arranged so that they do not cross the respective linear boundaries of pixels 912.

In another embodiment, as shown in FIG. 9C, the linear boundaries of channels 924 and the linear boundaries of pixels 922 do not cross each other. In yet another embodiment, as shown in FIG. 9E, the linear boundaries of pixels 942 do not cross the linear boundaries of channels 944.

As stated in the specification, at page 13, lines 1-12, the present invention advantageously results in a low halo, good signal-to-noise ratio, and good logarithmic gain for the image tube. Furthermore, the present invention permits the faces of the channels of an MCP to be mounted directly onto the pixel faces of a sensor. Furthermore, as described in the specification, at page 14, lines 1-5, misalignments between the boundaries of the pixels and the boundaries of the MCP channels result in undesirable electro-optical patterns, such as a Moire pattern. The present invention, eliminates the Moire pattern.

Ng discloses a solid state imaging sensor including a multiplying device and a solid state imaging sensor. Ng discloses that the electron multiplying device includes a plurality of channels and that the solid state imaging sensor includes a plurality of pixels. Although not disclosed by Ng, it is possible that the plurality of channels are arranged in a channel pattern and the plurality of pixels are arranged in a pixel pattern. There is, however, **no mapping** of **each of the plurality of channel patterns to a respective one of the plurality of pixel patterns** (as recited in original claim 1).

Furthermore, Ng does **not** suggest features of amended claim 1, namely, that each of the pixels in each of the channels includes a pixel face surface and a channel face surface, respectively, in opposing relationship to each other, and the pixel and channel face surfaces each have a linear boundary, wherein **the linear boundaries of the channels are arranged so that they do not cross respective linear boundaries of the pixels**.

Reconsideration is respectfully requested for amended claim 1.

Pryor discloses the use of a pockel cell modulator. Pryor, however, does **not** suggest any of the features discussed above that are missing from Ng.

Claims 2-10 depend from amended claim 1 and, therefore, are not subject to rejection in view of the cited references for at least the same reasons set forth for amended claim 1. Reconsideration of these dependent claims is respectfully requested.

Conclusion

Claims 1-10 are in condition for allowance.

Respectfully submitted,

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